

004400-19651960

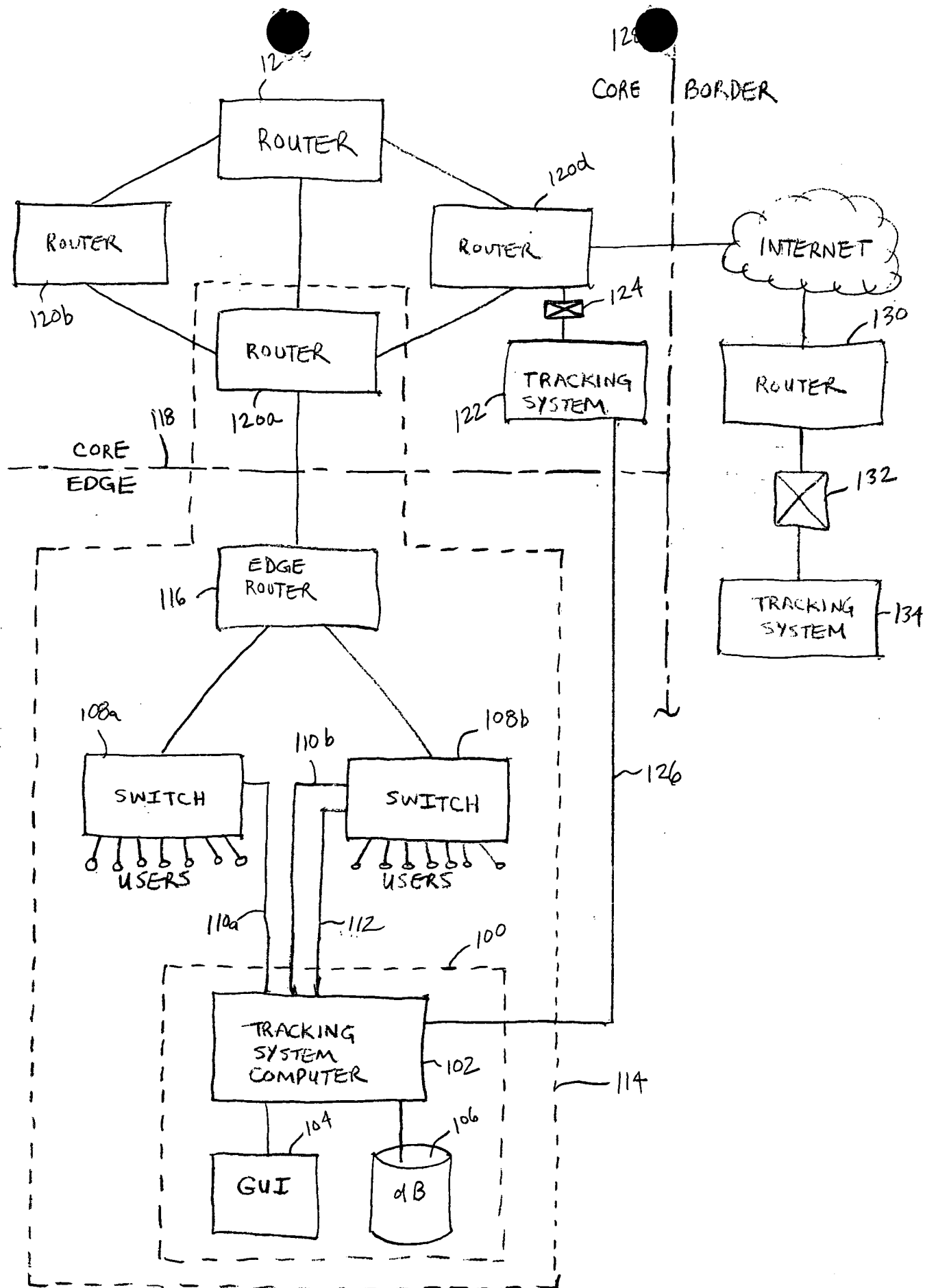


Fig. 1

202

204

206

208

FIG. 2

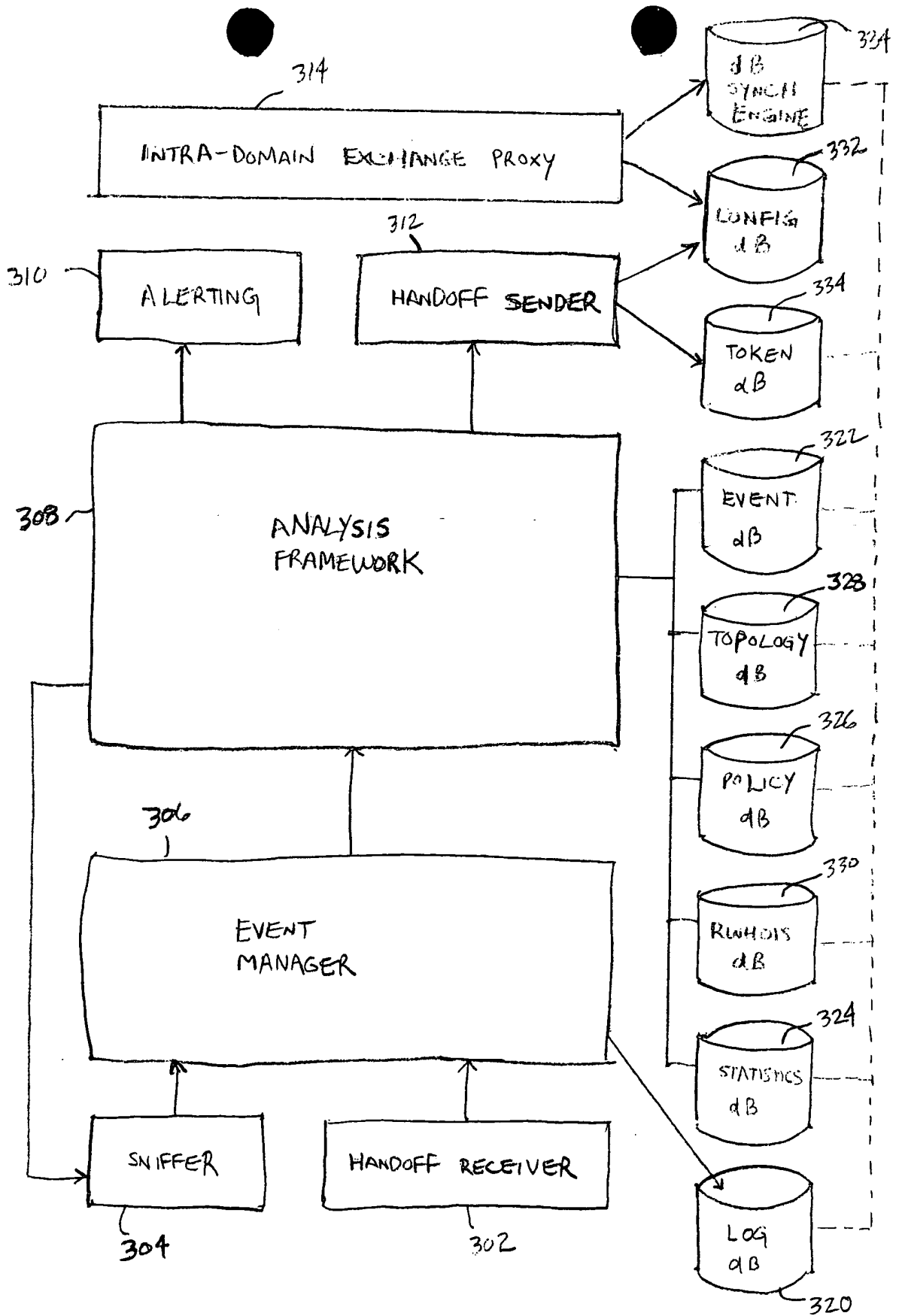


FIG. 3

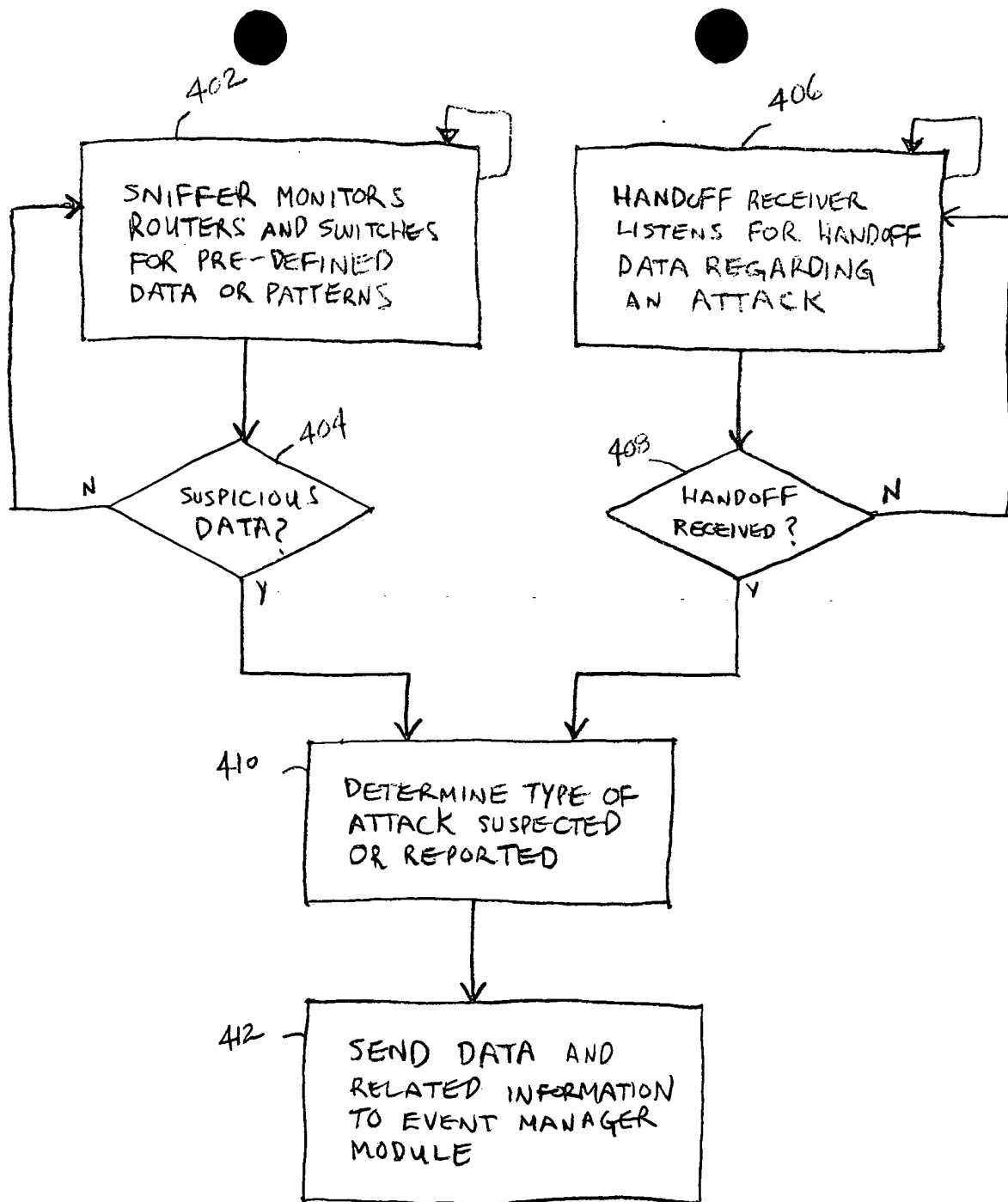


FIG. 4

```

graph TD
    502[RECEIVE EVENT DATA] --> 504[CALCULATE QUEUE ADDRESS FOR EVENT]
    504 --> 506[STORE EVENT DATA IN QUEUE AND COPY TO LOG DATABASE]
    506 --> 508[CHECK QUEUE IMMEDIATELY FOLLOWING MOST RECENTLY ACCESSED QUEUE]
    508 --> 510{CONTAINS DATA?}
    510 -- N --> 508
    510 -- Y --> 512[WAIT UNTIL INTERVAL HAS EXPIRED AND SEND DATA FOR ONE EVENT IN QUEUE TO ANALYSIS FRAMEWORK MODULE]
    512 --> 508

```

FIG. 5

	0	1	2	3	4	5	6
0		A-B-C			F		
1			D-G				
2					E		

FIG. 6

00112019651960

```

graph TD
    702[RECEIVE EVENT DATA] --> 704[CREATE EVENT OBJECT]
    704 --> 706[DETERMINE IF EVENT IS RELATED TO AN EXISTING INCIDENT]
    706 --> 708{RELATED INCIDENT?}
    708 -- Y --> 710[ASSOCIATE EVENT WITH EXISTING INCIDENT OBJECT]
    708 -- N --> 712[CREATE INCIDENT OBJECT]
    710 --> 714[QUERY POLICY DATABASE TO DETERMINE RESPONSIVE ACTION]
    712 --> 714
    714 --> 716[TAKE RESPONSIVE ACTION]
    702 --> 702

```

FIG. 7

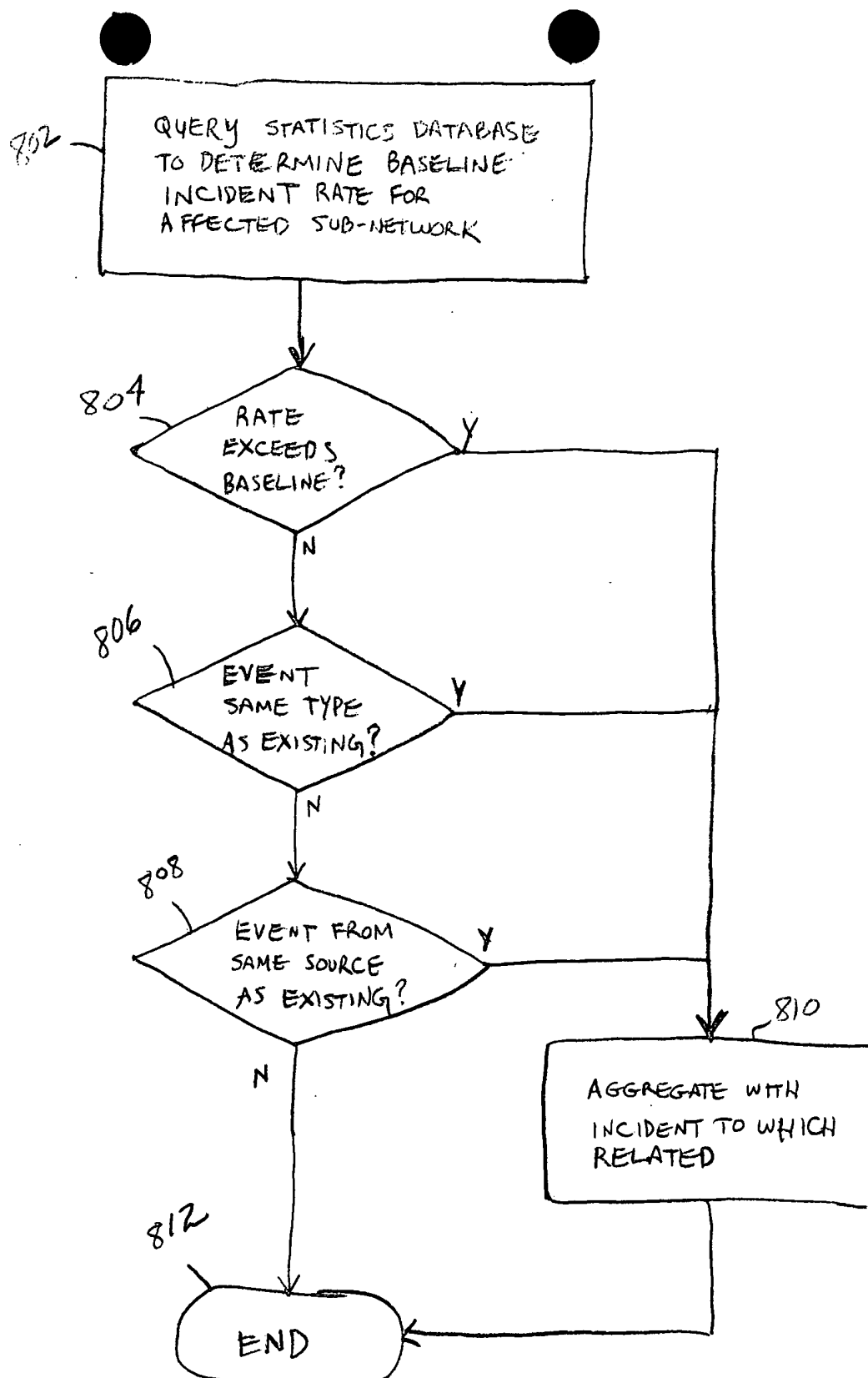
[illegible]

FIG. 8

RECEIVE INDICATION OF
RESPONSIVE ACTION
TO BE TAKEN 902

ALERT
REQUIRED? 904

SEND
ALERT 906

IDENTIFY
POINT OF
ATTACK 910

TRACK
BACK? 908

SHARE
WITHIN
DOMAIN? 912

PROVIDE DATA
TO OTHER TRACKING
SYSTEM 914

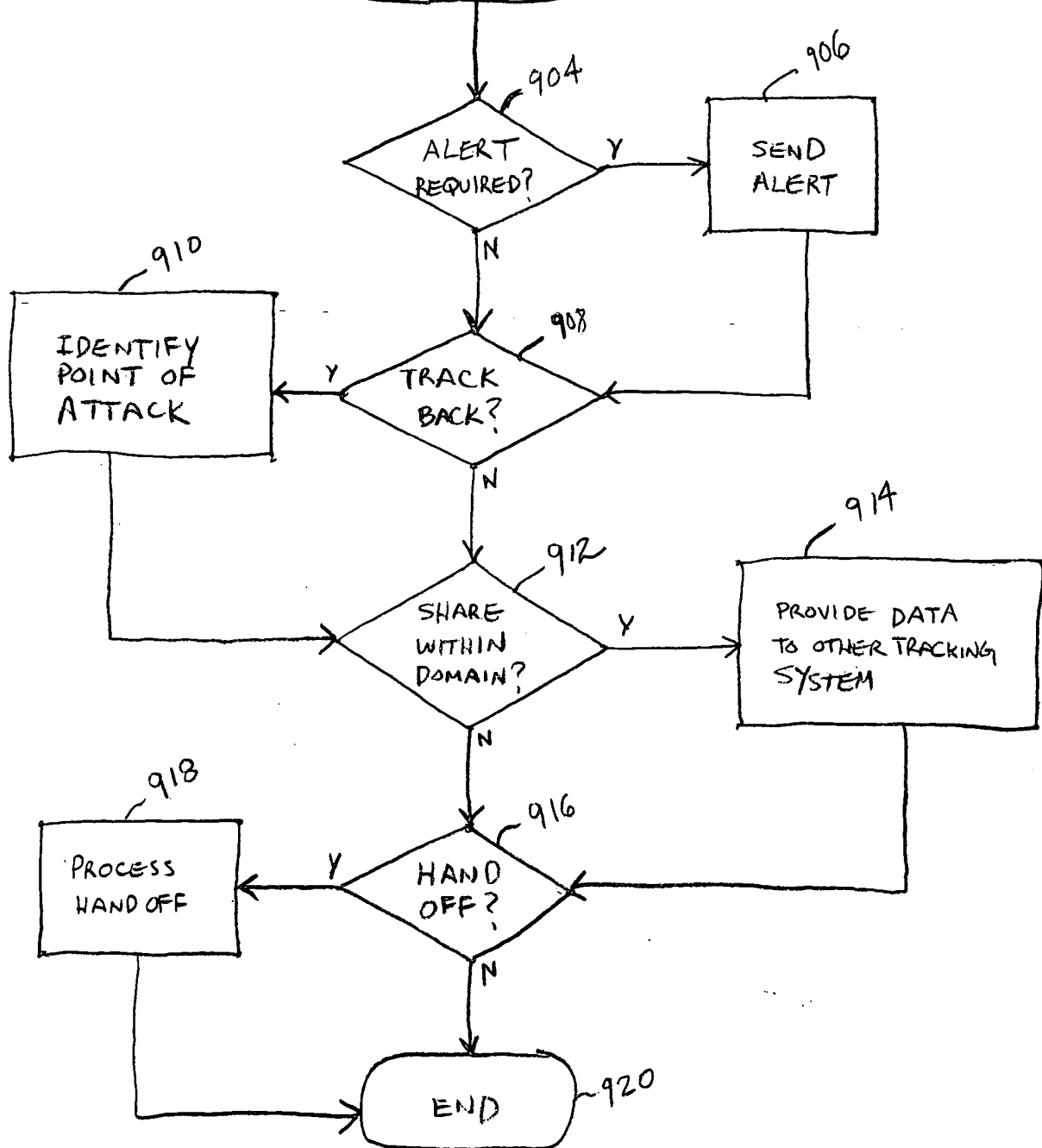
PROCESS
HAND OFF 918

HAND
OFF? 916

END 920

FIG. 9

004420-19657560

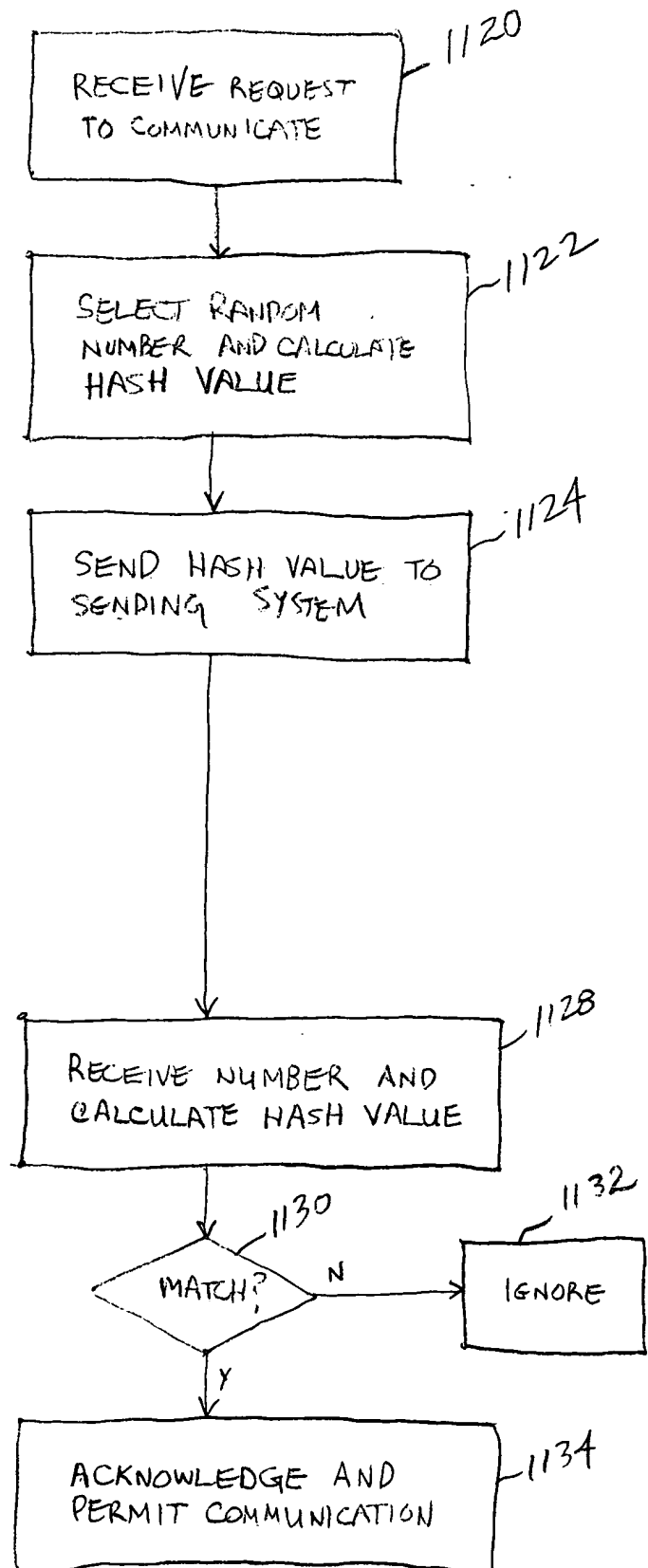


```

graph TD
    1002[CREATE TOPOLOGY MAP] --> 1004[QUERY NODE AT WHICH  
ATTACK WAS DETECTED TO  
IDENTIFY PORT THROUGH  
WHICH MESSAGE ENTERED  
NODE]
    1004 --> 1006{EXTERNAL  
CONNECTION?}
    1006 -- Y --> 1008[IDENTIFIED PORT  
IS POINT OF  
ATTACK]
    1006 -- N --> 1012[QUERY NODE TO WHICH  
PORT IS CONNECTED TO  
IDENTIFY PORT THROUGH  
WHICH MESSAGE ENTERED  
NODE]
    1008 --> 1010([END])
    1012 --> 1006
  
```

FIG. 10

```
graph TD; 1102[SEND REQUEST TO COMMUNICATE] --> 1104[RECEIVE HASH VALUE]; 1104 --> 1106[FIND A NUMBER N WITH HASH VALUE WITH SUFFICIENT MATCH]; 1106 --> 1108[SEND NUMBER TO RECEIVING SYSTEM]; 1108 --> 1114[SEND DATA];
```



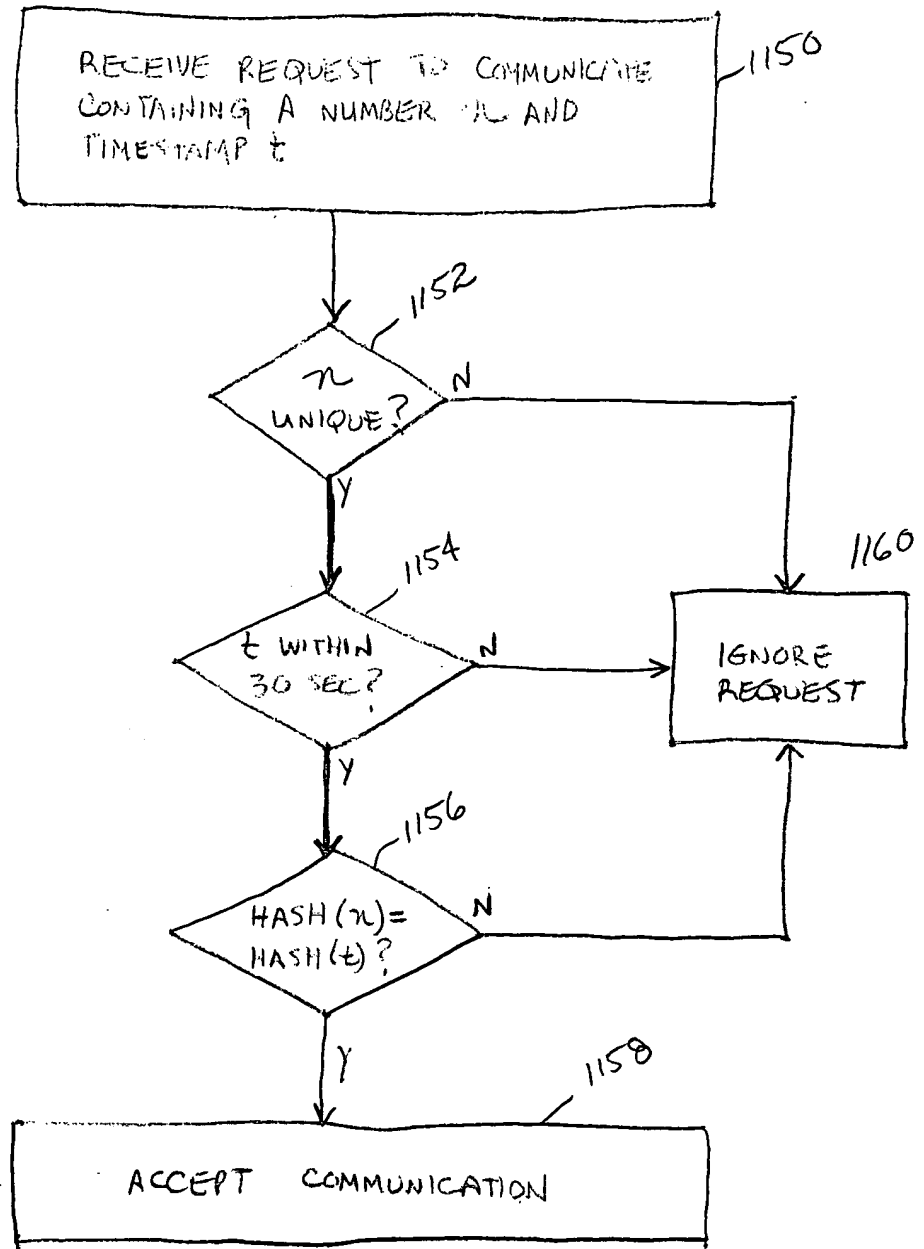


FIG. 11C

004720-19651960

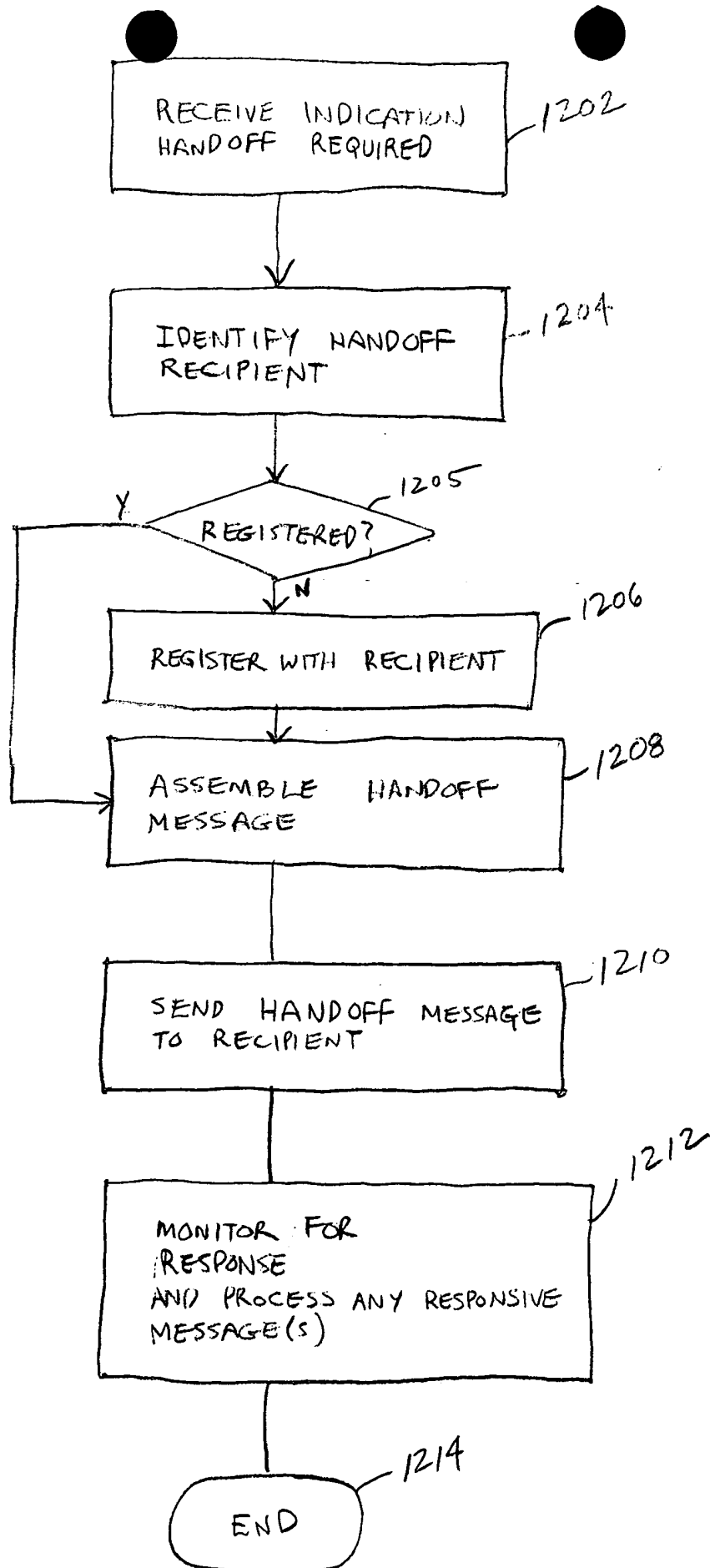
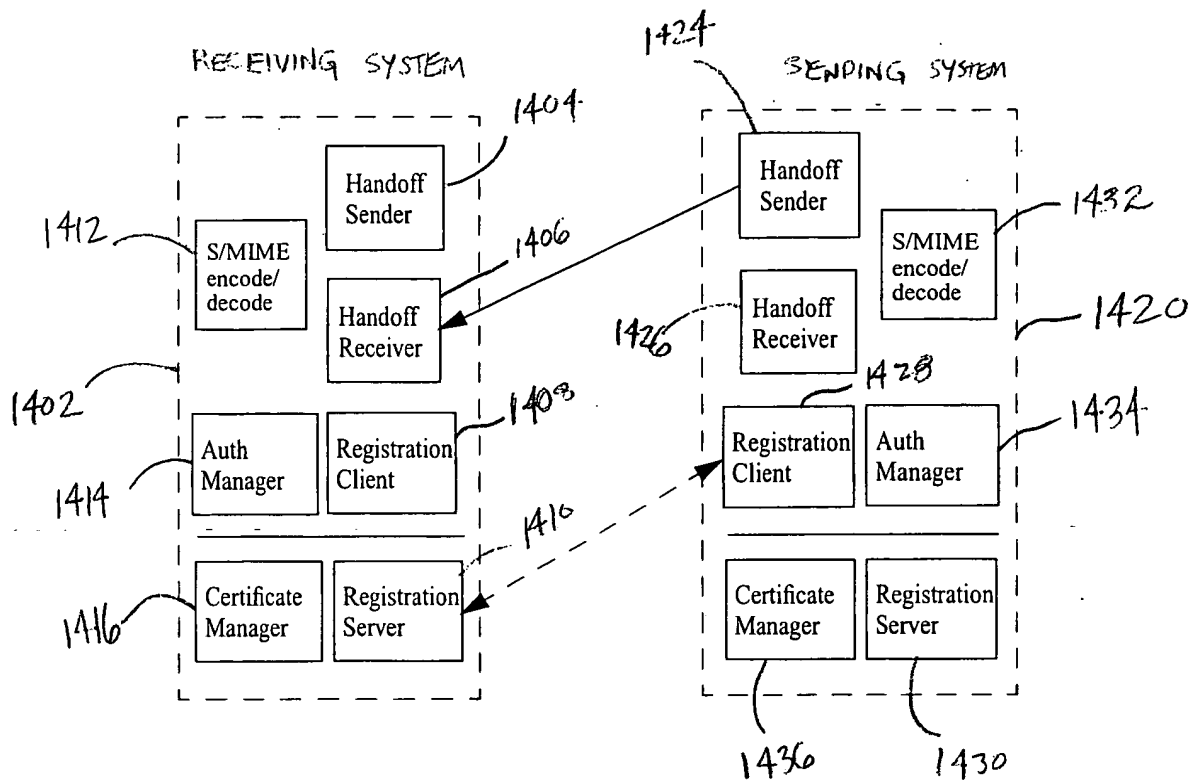


FIG. 12

```

graph TD
    1302[RECEIVE REQUEST  
TO REGISTER] --> 1304[DESIGNATE HANDOFF  
RECEIVER PORT  
AND ADDRESS]
    1304 --> 1306[COMPLETE REGISTRATION  
PROCESS]
    1306 --> 1308[RECEIVE AND PROCESS  
HANDOFF MESSAGES]
    1308 --> 1310([END])
  
```

FIG. 13



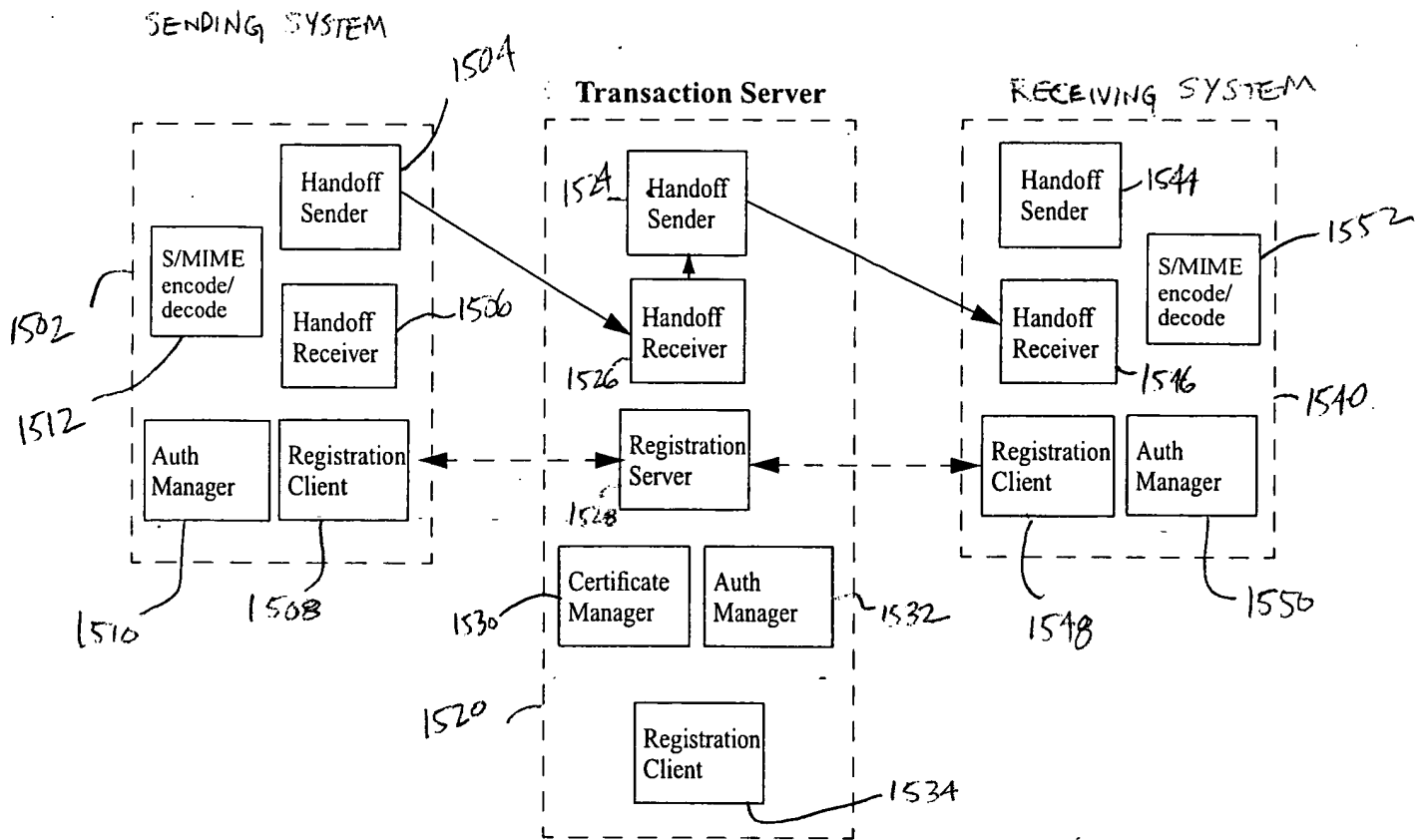
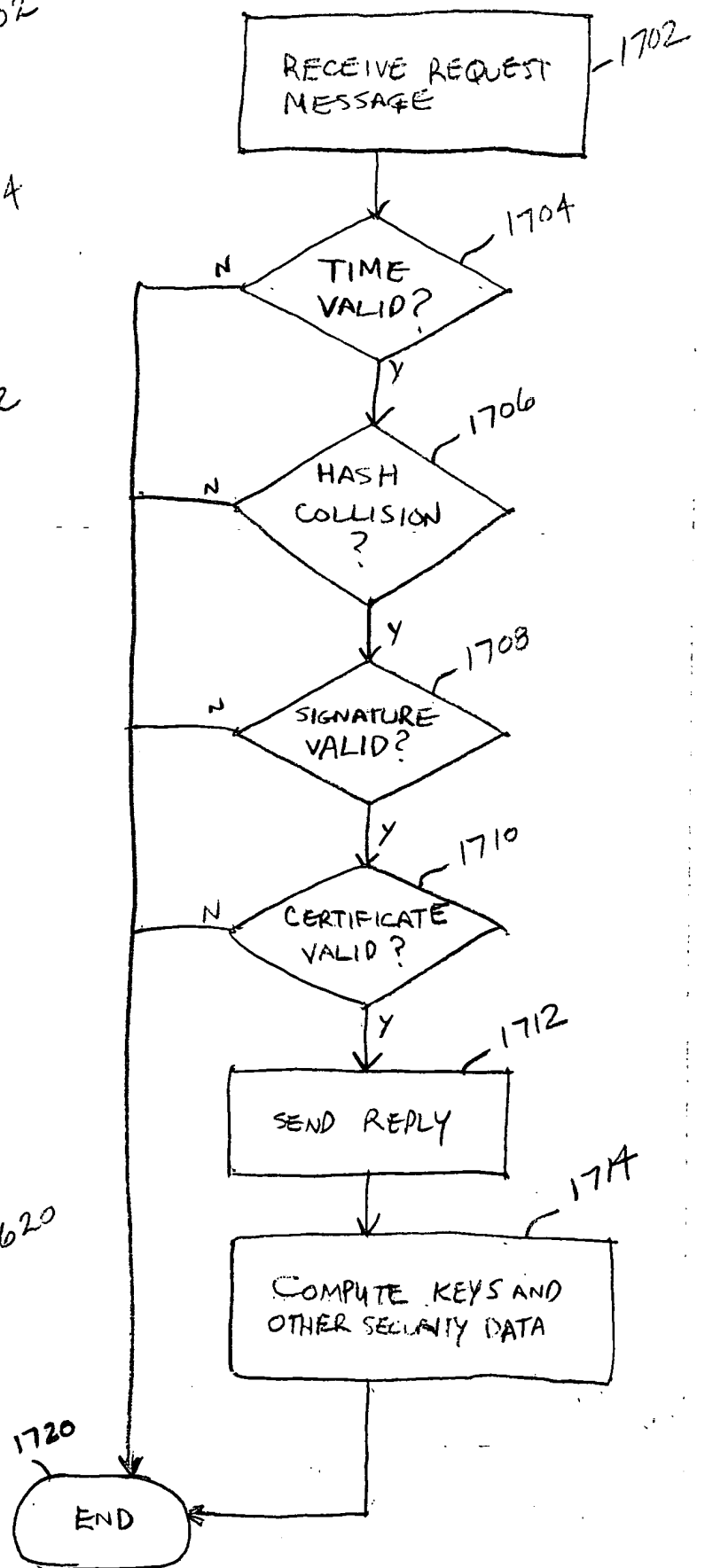


FIG. 15


```

graph TD
    1602[COMPUTE HASH COLLISION] --> 1604[SEND REQUEST MESSAGE]
    1604 --> 1612[RECEIVE REPLY]
    1612 --> 1614{SIGNATURE VALID?}
    1614 -- N --> 1630([END])
    1614 -- Y --> 1616{CERTIFICATE VALID?}
    1616 -- N --> 1630
    1616 -- Y --> 1618[COMPUTE KEYS AND OTHER SECURITY DATA]
    1618 --> 1620[PROCESS RECEIVER AND NETWORK INFORMATION]
    1620 --> 1630

```



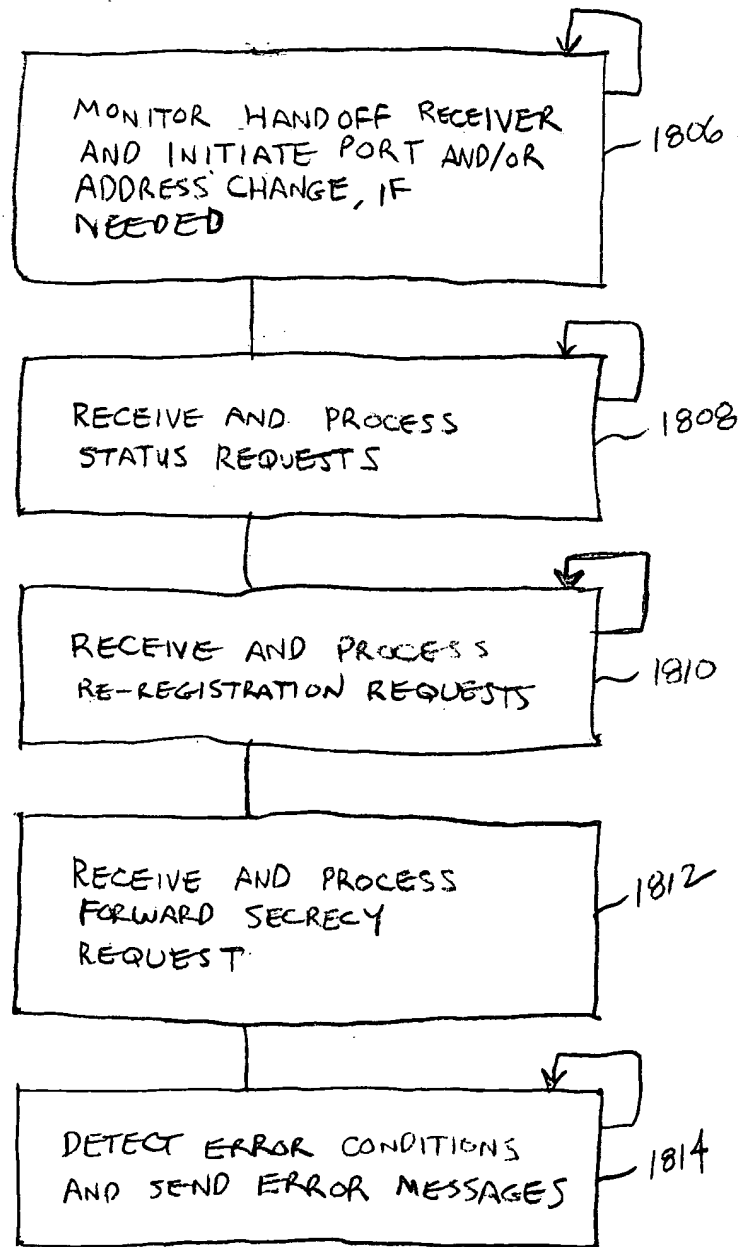


FIG. 18

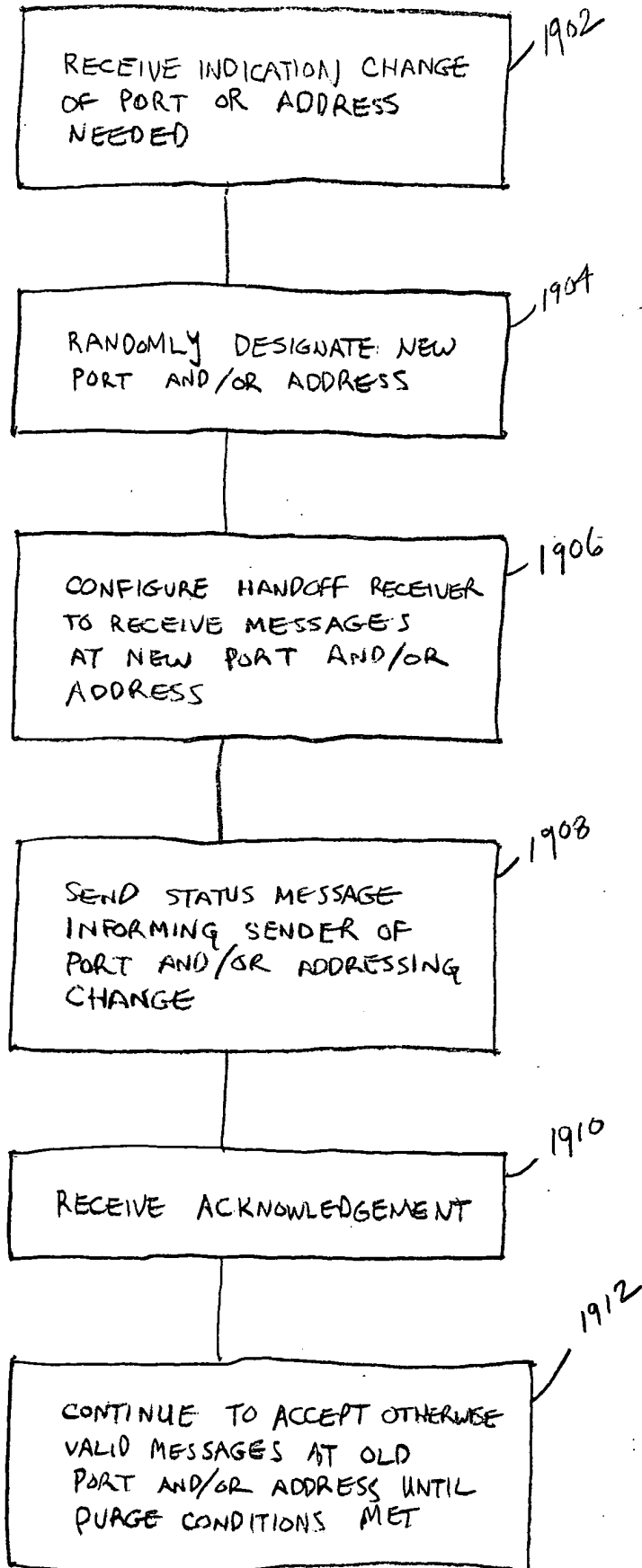


FIG. 19

RECEIVE SEED NEGOTIATED
AT REGISTRATION

USE PSEUDO-RANDOM NUMBER GENERATOR TO GENERATE A STREAM OF SEQUENCE NUMBERS

DEFINE A ROLLING WINDOW OF VALID SEQUENCE NUMBERS AVAILABLE FOR USE AS SEQUENCE NUMBER IN MESSAGES OF A PARTICULAR TYPE

RECEIVE MESSAGE

VALID
SEQUENCE
NO. ?

AUTHENTICATE AND PROCESS MESSAGE

FIG. 20